GEARTECH	CHECKLIST				No. CK4100	S	HEET 1 OF	2
CLARTEON			Rev. A					
Gear Design Audit					BY RLE	С	ATE 3/22/	98
				CKD JRM	С	ATE 3/23/	98	
GEAR GEOMETRY								
Question Y N R Comments								
Do gear drawings specify the)							
following data:								
z = number of teeth?								
m _n = normal module?								
α_n = normal pressure angle?	<u> </u>							
β = helix angle? Helix hand?								
a _w = operating center								
distance?								
b = face width?								
d _a = tip diameter?								
x = profile shift coefficient?								
W _k = span measurement?								
k = number of teeth spanned	l?							
Tip chamfer?								
End round?								
Edge round? Profile modification?								
Helix modification?								
Trenx meanication:		GI	-AR	GEOME	TRIC QUALITY			
Question	Υ	N.	R	CLOIVIL		mments		
Do gear drawings specify the								
following data:								
Accuracy specification (DIN, ISO, or AGMA)?								
Accuracy class?								
Profile total deviation, F_{α} ?								
Profile slope deviation, $f_{H\alpha}$?								
Profile form deviation, $f_{f\alpha}$?								
Total helix deviation, F _β ?								
Helix slope deviation, f _{Hβ} ?								
Helix form deviation, $f_{f\beta}$? Single pitch deviation, f_{pt} ?								
Total cumulative pitch								
deviation, F _p ?								
Runout, F _r ?								
Reference datum for radial								
runout?								
Reference datum for axial runout?								
Tolerance for radial runout?								
Tolerance for axial runout?								
Profile tolerance chart?			1					
Helix tolerance chart?	.62	1						
Gear tooth surface roughness? GEAR METALLURGICAL QUALITY								
Question	TY	N	R	LIALLU		mments		
Do gear drawings specify the		111	IX.			шисиц		
following data:								
Material form (forging or bar								
stock)?								
Material alloy?								

GEARTECH	CHECKLIST			No. CK4100	SHEET 2 OF 2			
				Rev. A				
Gear Design Audit				BY RLE	DATE 3/22/98			
				CKD JRM	DATE 3/23/98			
Question	Υ	N	R	Comme	I .			
Material grade?								
Heat treatment?								
Surface hardness?								
Effective case depth after								
grind?								
Core hardness?								
Magnetic particle inspection?								
Surface temper etch								
inspection?								
	L	GE	AR F	ATING CALCULATIONS				
Question	Υ	N	R	Comme	nts			
Are reasonable values chose			1	2 9				
for the following parameters:								
Load spectrum?								
Material grade?								
Gear tooth accuracy?								
Surface hardness?								
Load distribution factor, C _m ?								
Dynamic factor, C _v ?								
Gear tooth temperature?								
Lubricant dynamic viscosity?								
Lubricant pressure-viscosity								
coefficient?								
Gear tooth surface roughness	s?							
Gear tooth coefficient of	J.							
friction?								
Are Miner's Rule lives								
adequate?								
Do gears conform to								
AGMA/AWEA 921:								
Adequate life?	_							
Pinions have at least 20 teeth	1?							
Profile shift designed for								
balanced specific sliding?								
Aspect ratio ≤ 1.0 for single helical?								
Aspect ratio ≤ 2.0 for double								
helical?								
Profiles modified?								
Helices modified?								
Transverse contact ratio ≥ 1.4	1?							
Axial contact ratio ≥ 1.0?								
Accuracy ≥ AGMA Q =11?								
DESIGN CONTROL								
Question Y N R Comments								
Question	+-	1.4	· `	Comme				
	+	1	<u> </u>					
	+							
		-						
	+	-						
	+	-						
		1						
1	1	1	1					